

c.) Amendments to the Claims

1. (Currently amended) In an electronic device that accepts hand drawn entries, a method for recognizing the hand drawn entries, comprising the steps of:

- receiving each hand drawn entry as a plurality of sequential points;
- performing at least one of the following steps in any order:
 - measuring the size of the hand drawn entry and comparing the size of the hand drawn entry to a size range;
 - determining the existence and number and angles of vertices in a line which could be drawn between said points;
- performing a Wide Pen Test including the reiterative steps of constructing an invisible minimum bounding rectangle about the hand drawn entry, placing in the rectangle an invisible trial object constructed of lines forming an identifiable geometric shape and having a defined pixel width, calculating the number of points in the hand drawn entry that lie within said lines of said trail object, and identifying the hand drawn entry as said trial object is said number of points exceeds a predetermined coincidence threshold;
- comparing the results of said at least one step to a set of rules, a favorable comparison leading to conclusive identification of the hand drawn entry as an identified shape.

2. (original) The method for recognizing hand drawn entries of claim 1, wherein said at least one step includes determining the distance between said vertices.

3. Canceled

4. (original) The method for recognizing hand drawn entries of claim 1, wherein said at least one step includes performing a test for Golden Clues.

5. (original) The method for recognizing hand drawn entries of claim 1, wherein said at least one step includes the step of excluding identification of shapes that do not conform to said set of rules.

6. (original) The method for recognizing hand drawn entries of claim 1, wherein said at least one step includes excluding identification of shapes that do not conform to said set of rules regarding size.

7. (original) The method for recognizing hand drawn entries of claim 1, further including a plurality of hand drawn entries, each of said hand drawn entries being analyzed individually.

8. (original) The method for recognizing hand drawn entries of claim 1, further including a plurality of hand drawn entries, said lines being agglomerated and analyzed as a single entity.

9. (Currently amended) In an electronic device that accepts hand drawn entries, a method for recognizing the hand drawn entries, comprising the steps of:

- receiving each hand drawn entry as a plurality of sequential points;
- performing at least one of the following steps in any order:
 - measuring the size of the hand drawn entry and comparing the size of the hand drawn entry to a size range;
 - determining the existence and number and angles of vertices in a line which could be drawn between said points;
 - comparing the results of said at least one step to a set of rules, a favorable comparison leading to conclusive identification of the hand drawn entry as an identified shape,
- further including a plurality of hand drawn entries of ~~different~~ various colors, said set of rules ~~including color rules to determine~~ causing agglomeration of said entries of the same color as a single entity.

10. (Previously amended) In an electronic device that accepts hand drawn entries, a method for recognizing the hand drawn entries, comprising the steps of:

- receiving each hand drawn entry as a plurality of sequential points;
- performing at least one of the following steps in any order:
 - measuring the size of the hand drawn entry and comparing the size of the hand drawn entry to a size range;
 - determining the existence and number and angles of vertices in a line which could be drawn between said points;

comparing the results of said at least one step to a set of rules, a favorable comparison leading to conclusive identification of the hand drawn entry as an identified shape,

further including the step of using arrow logics to establish attributes of said identified shape.

11. (Previously amended) In an electronic device that accepts hand drawn entries, a method for recognizing the hand drawn entries, comprising the steps of:

- receiving each hand drawn entry as a plurality of sequential points;
- performing at least one of the following steps in any order:
 - measuring the size of the hand drawn entry and comparing the size of the hand drawn entry to a size range;
 - determining the existence and number and angles of vertices in a line which could be drawn between said points;
 - comparing the results of said at least one step to a set of rules, a favorable comparison leading to conclusive identification of the hand drawn entry as an identified shape,
- further including the step of creating an info window for at least one of said identified shapes, said info window enabling setting and altering attributes for said at least one identified shape.

12. (original) The method for recognizing hand drawn entries of claim 1, further including the step of carrying out further analytic tests to determine the specific object type.

13. (original) The method for recognizing hand drawn entries of claim 1, wherein said at least one step includes determining the angular trend of said plurality of sequential points.

14. (original) The method for recognizing hand drawn entries of claim 13, further including the step of excluding identification of shapes that do not conform to said set of rules regarding angular trend.

15. (Canceled)

16. (Currently amended) The method for recognizing hand drawn entries of claim ~~15~~ 1, further including the step of determining the size of said bounding rectangle, and comparing said size to size rules for at least one identifiable shape.

17. (Canceled)

18. (Currently amended) The method for recognizing hand drawn entries of claim ~~17~~ 1, further including the step of reiterating said Wide Pen Test when said number of points does not exceed said predetermined threshold, said reiteration

including generating a further trial object at least one identifiable geometric shape
inscribed in said bounding rectangle, and comparing the coincidence of said points
of said hand drawn entry with a wide pen stroke defining ~~at least one identifiable~~
~~geometric shape~~ said further trial object.

19. (Currently amended) The method for recognizing hand drawn entries of claim 18, wherein said wide pen stroke is selected to be a predetermined width, and further including the step of adaptively altering said predetermined wide pen stroke width by increasing said width when said number of points does not exceed said predetermined threshold and thereafter reiterating said Wide Pen Test.

20. (Currently amended) The method for recognizing hand drawn entries of claim 19, wherein the ~~identifiable geometric shape~~ trial object yielding a degree of coincidence greater than a predetermined coincidence threshold is determined to be the shape of said hand drawn entry.

21. (original) The method for recognizing hand drawn entries of claim 20, further including the step of adaptively altering said coincidence threshold.

22. (original) The method for recognizing hand drawn entries of claim 20, further including the step of determining the angular trend of said hand drawn entry.

23. (original) The method for programming an electronic device of claim 11, including the step of drawing at least one arrow from an attribute shown in an info window to at least one identified shape outside said info window.

24. (original) The method for recognizing hand drawn entries of claim 1, further including the step of determining the angular orientation of said hand drawn entry with respect to a reference orientation.

25. (original) The method for recognizing hand drawn entries of claim 24, further including the step of excluding identification of shapes that do not conform to said set of rules regarding angular orientation.

26. (Previously amended) The method for recognizing hand drawn entries of claim 1, further including the step of determining the proximity of said hand drawn entry to another graphic object , and thereafter excluding identification of shapes that do not conform to said set of rules regarding maximum proximate distance to said another graphic object.

27. canceled.

29. (Previously amended) In an electronic device that accepts hand drawn entries, a method for recognizing the hand drawn entries, comprising the steps of:
receiving each hand drawn entry as a plurality of sequential points;

performing at least one of the following steps in any order:

measuring the size of the hand drawn entry and comparing the size of the hand drawn entry to a size range;

determining the existence and number and angles of vertices in a line which could be drawn between said points;

comparing the results of said at least one step to a set of rules, a favorable comparison leading to conclusive identification of the hand drawn entry as an identified shape,

further including the step of identifying a portion of said hand drawn entry drawn more slowly than other portions of said hand drawn entry.

30. (original) The method for recognizing hand drawn entries of claim 29, further including the step of determining the existence of a vertex in said portion of said hand drawn entry, and calculating the vertex angle.

31. (original) The method for recognizing hand drawn entries of claim 29, wherein said portion of said hand drawn entry is identified by storing and analyzing time of entry data of said plurality of points.

32. (Currently amended) The method for recognizing hand drawn entries of claim 30, wherein if a vertex angle in said portion of said hand drawn entry is ~~substantially~~ orthogonal $\pm 20^\circ$, a golden clue test provides increased potential for identifying a rectilinear shape.

33. (Currently amended) The method for recognizing hand drawn entries of claim 30, wherein if a vertex angle in said portion of said hand drawn entry is ~~substantially~~ non-orthogonal $\pm 20^\circ$, a golden clue test provides increased potential for exclusion of all rectilinear shapes.

34. (Previously amended) The method for recognizing hand drawn entries of claim 30, wherein if a pair of vertex angles in said portion of said hand drawn entry are substantially orthogonal, proximate, and opposite, a golden clue test provides increased potential for identification of a folder shape.

35. (Previously amended) The method for recognizing hand drawn entries of claim 30, further including a golden clue test for identifying a first-drawn portion of said hand drawn entry, determining the existence of a vertex in said first drawn portion of said hand drawn entry, and calculating the vertex angle.

36. (original) The method for recognizing hand drawn entries of claim 35, wherein if a vertex angle in said first-drawn portion of said hand drawn entry is substantially orthogonal, said golden clue test provides increased potential for identification of rectilinear shapes.

37. (original) The method for recognizing hand drawn entries of claim 35, wherein if a vertex angle in said first-drawn portion of said hand drawn entry is

substantially non-orthogonal, said golden clue test provides increased potential for exclusion of all rectilinear shapes.

38. (Currently amended) In an electronic device that accepts hand drawn entries, a method for recognizing the hand drawn entries, comprising the steps of:
receiving each hand drawn entry as a plurality of sequential points lying on the hand drawn line;

a slice step of identifying a starting point, then identifying a first sequential point ~~three of said points~~ that ~~are~~ is adjacent and spaced apart greater than a minimum pixel length distance, then identifying a second sequential point spaced from said first sequential point at least said minimum pixel length distance, said starting point and first and second sequential points constituting a three-point slice; constructing an angle defined by said three points, measuring the constructed angle, and reiterating said slice step in serial fashion with consecutive points of said hand drawn entry to include all said points of said hand drawn entry.

39. (original) The method for recognizing hand drawn entries of claim 38, further including the step of storing the angle measurement of a slice when it exceeds a predetermined angle threshold.

40. (original) The method for recognizing hand drawn entries of claim 39, further including the step of reducing said predetermined angle threshold

whenever said reiterated slice step yields an angular measurement less than said predetermined angle threshold.

41. (original) The method for recognizing hand drawn entries of claim 39, wherein if an angle measurement of a given slice step exceeds said predetermined angle threshold, and the angle measurement of the subsequent slice step is less than said predetermined angle threshold, a vertex is identified in the portion of said hand drawn entry containing said given slice step.

42-47. (Canceled)

48. (original) The method for recognizing hand drawn entries of claim 1, wherein said results of said at least one step include numerical parameters that correspond to characteristics of said hand drawn entry, said numerical parameters being compared to stored magic number values.

49. (original) The method for recognizing hand drawn entries of claim 48, wherein said magic number values are selectively varied in response to inconclusive comparisons to said set of rules.

50. (original) The method for recognizing hand drawn entries of claim 49, wherein said magic number values can be selectively varied by user input.

Claims 51-94. Withdrawn

95. (original) The method for programming an electronic device of claim 11, including the step of drawing at least one arrow to an attribute shown in an info window from at least one identified shape outside said info window.

96. (canceled)

Claims 97-103. Withdrawn